

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P510249

Luminaire Tested: **VERD-M-CA4-230-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-760-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 1050mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32251 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

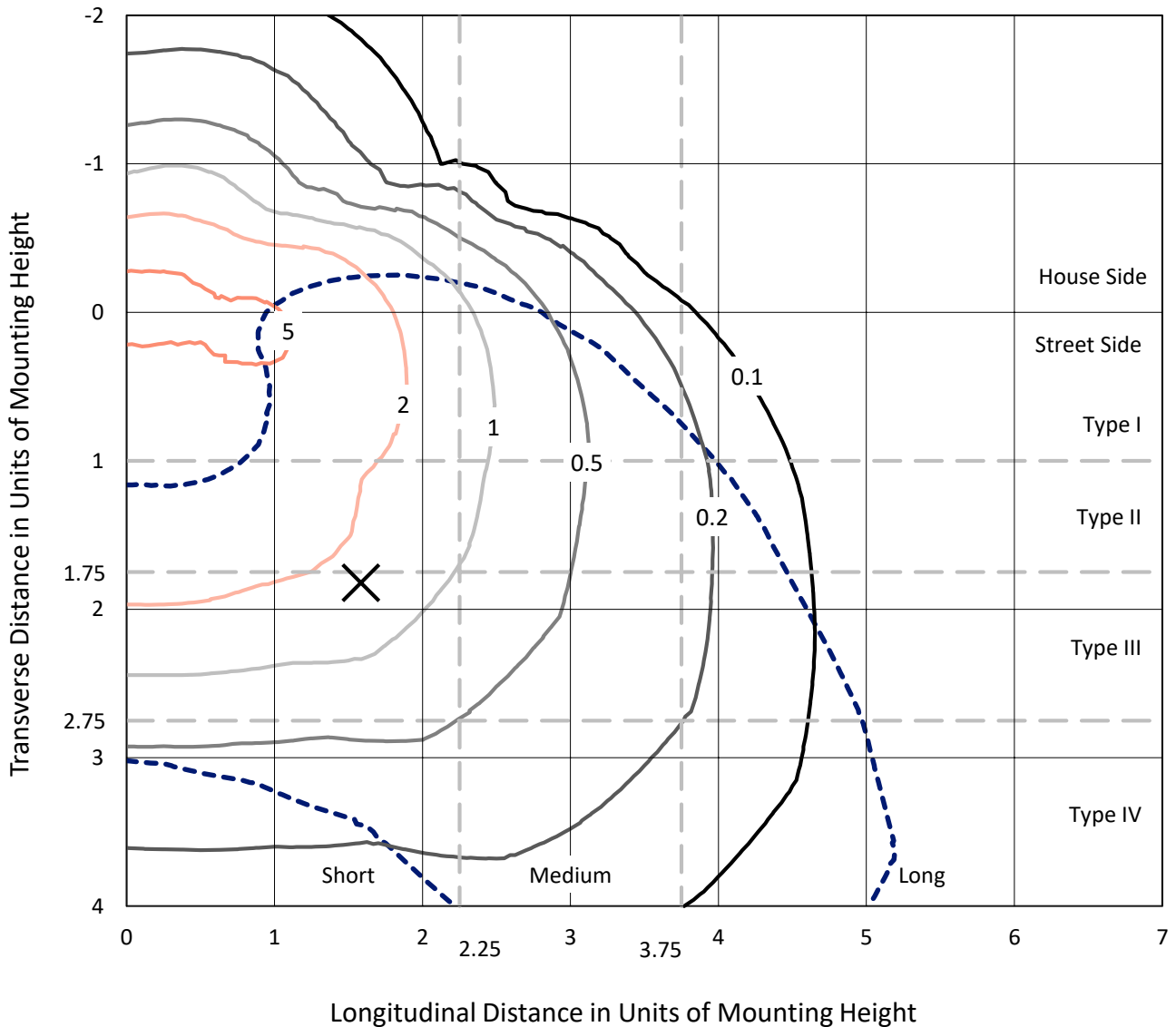
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

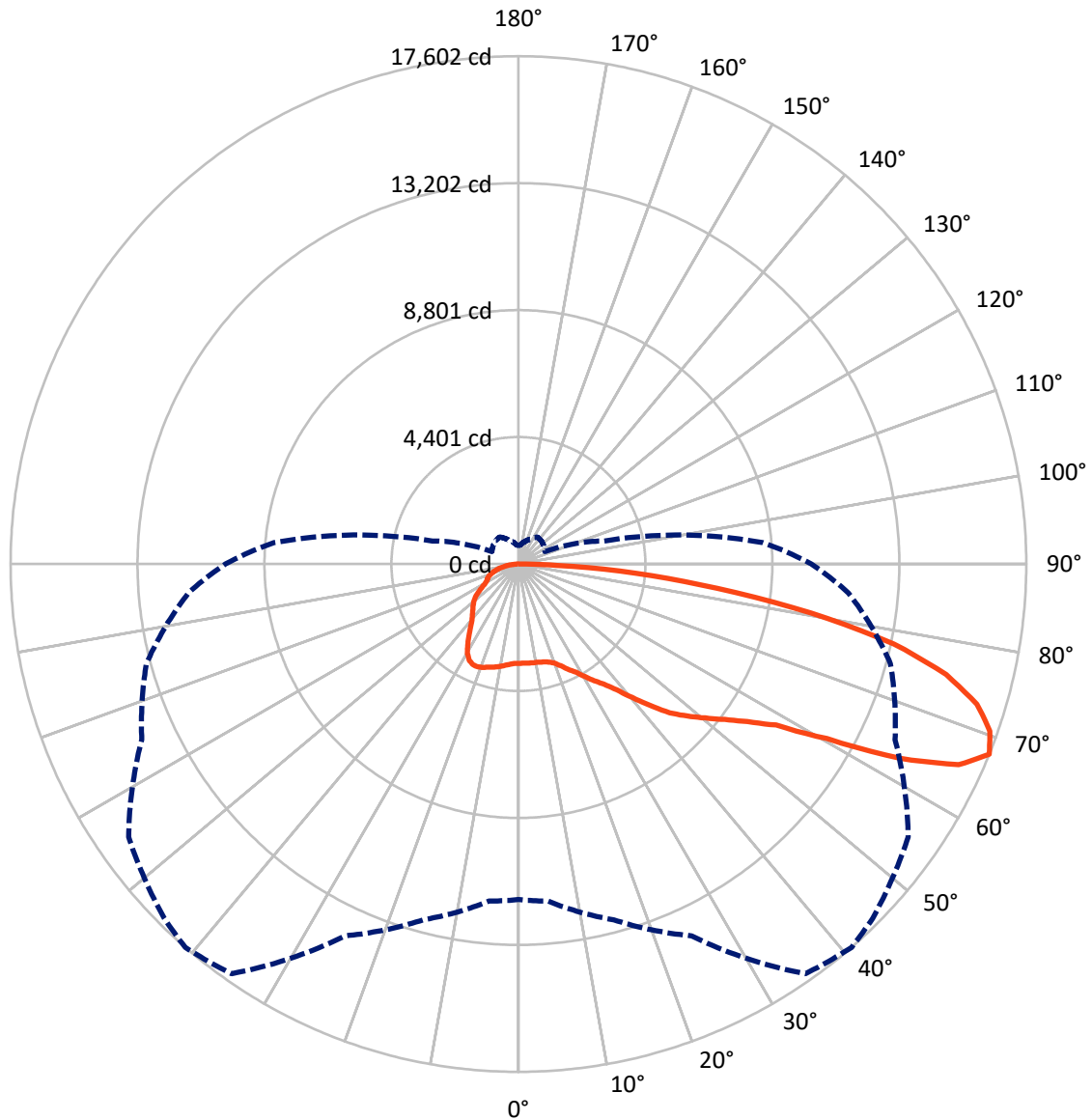
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7298.2	0.0	7298.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	24952.7	0.0	24952.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	32251.0	0.0	32251.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.7	1.0
10°-20°	1032.0	3.2
20°-30°	1845.4	5.7
30°-40°	2893.6	9.0
40°-50°	4487.2	13.9
50°-60°	6325.8	19.6
60°-70°	8063.9	25.0
70°-80°	6034.5	18.7
80°-90°	1235.9	3.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	32251.0	100.0
0°-180°	32251.0	100.0

Coefficient of Utilization



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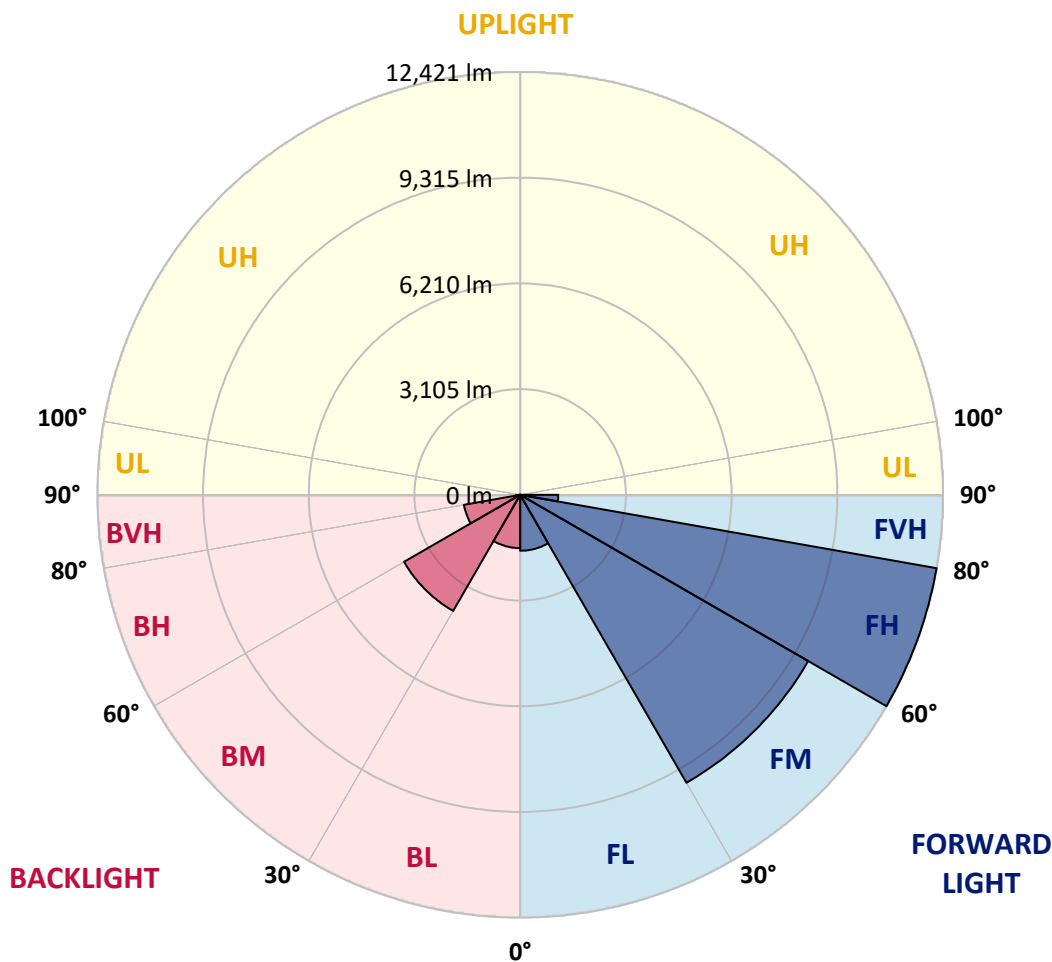
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1643.2	5.1			
FM (30°-60°)	9768.6	30.3			
FH (60°-80°)	12420.5	38.5			G5
FVH (80°-90°)	1120.5	3.5			G5
BL (0°-30°)	1566.9	4.9	B3/2500		
BM (30°-60°)	3938.0	12.2	B3/5000		
BH (60°-80°)	1677.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	115.4	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4
2.5°	3401.0	3440.4	3434.6	3427.3	3439.0	3440.4	3406.9	3420.0	3427.3	3439.0	3457.9
5°	3409.8	3449.2	3446.3	3433.1	3441.9	3446.3	3415.6	3439.0	3439.0	3443.4	3465.2
7.5°	3390.8	3428.8	3428.8	3424.4	3443.4	3460.9	3433.1	3453.6	3465.2	3476.9	3491.5
10°	3373.3	3405.4	3417.1	3414.2	3457.9	3462.3	3443.4	3493.0	3512.0	3523.6	3541.1
12.5°	3354.3	3393.7	3409.8	3425.8	3472.5	3488.6	3478.4	3529.5	3568.9	3589.3	3608.3
15°	3345.6	3389.3	3415.6	3439.0	3490.1	3519.3	3519.3	3596.6	3643.3	3669.6	3703.2
17.5°	3406.9	3452.1	3472.5	3491.5	3538.2	3577.6	3574.7	3665.2	3733.8	3774.7	3836.0
20°	3558.7	3612.7	3624.3	3631.6	3660.8	3675.4	3671.1	3768.9	3863.7	3941.1	4009.7
22.5°	3822.9	3855.0	3860.8	3831.6	3838.9	3850.6	3843.3	3897.3	4005.3	4095.8	4218.4
25°	4038.9	4090.0	4075.4	4033.1	4038.9	4054.9	4033.1	4116.3	4193.6	4311.9	4435.9
27.5°	4266.6	4304.6	4288.5	4262.2	4256.4	4244.7	4240.3	4346.9	4460.7	4554.2	4738.1
30°	4543.9	4564.4	4517.7	4506.0	4516.2	4523.5	4495.8	4631.5	4735.2	4869.4	5117.6
32.5°	5011.0	5030.0	4962.9	4783.3	4787.7	4821.3	4797.9	4968.7	5164.3	5327.8	5580.3
35°	5606.6	5606.6	5554.0	5301.5	5110.3	5111.7	5117.6	5358.4	5721.9	6088.3	6348.1
37.5°	6209.4	6229.9	6130.6	5900.0	5657.7	5529.2	5421.2	5730.6	6206.5	7023.9	7410.7
40°	6837.1	6869.2	6720.3	6508.6	6229.9	6083.9	5958.4	6146.7	6788.9	7950.8	8257.3
42.5°	7385.9	7431.2	7277.9	7054.6	6860.4	6695.5	6505.7	6581.6	7429.7	8831.0	9004.7
45°	7896.8	7921.6	7791.7	7607.8	7447.2	7356.7	7223.9	7311.5	8162.4	9692.2	9660.1
47.5°	8273.4	8309.9	8191.6	8092.4	7927.4	7873.4	7872.0	8112.8	8987.2	10378.2	10229.3
50°	8885.0	8857.2	8591.6	8470.4	8369.7	8387.2	8429.6	8845.6	9956.4	11039.4	10708.1
52.5°	9911.1	9860.0	9270.3	9017.8	8893.7	8950.7	8972.6	9509.7	10934.4	11610.2	11103.7
55°	11238.0	11074.5	10645.3	9968.1	9578.3	9632.3	9607.5	10223.5	11716.7	12154.6	11397.1
57.5°	12115.2	12268.5	12062.7	11675.9	10708.1	10531.5	10473.1	10930.0	12440.7	12675.7	11700.7
60°	12877.2	13131.1	13458.1	13210.0	12948.7	12287.5	11743.0	11732.8	13078.6	13023.1	11823.3
62.5°	13681.4	13815.7	14319.3	14472.6	14957.2	14836.0	14106.2	12748.7	13716.5	13277.1	11894.8
65°	12868.4	13047.9	13964.6	14801.0	16594.9	16770.1	16532.2	14637.5	14158.8	13407.0	11792.6
67.5°	11630.6	11729.9	12767.7	14218.6	17336.4	17602.1	17362.7	16491.3	14404.0	13350.1	11477.3
70°	10044.0	10160.7	11151.8	13131.1	17298.5	17333.5	17240.1	16662.1	14306.2	13083.0	10683.3
72.5°	8143.5	8290.9	9162.3	11217.5	16469.4	16621.2	16473.8	16323.4	14031.8	12335.6	9315.6
75°	6161.2	6356.8	7134.8	8943.4	14554.3	15319.2	15338.2	15802.3	12966.2	10575.3	6761.2
77.5°	4202.4	4389.2	5126.3	6813.7	12081.6	13303.4	13621.6	14129.6	10833.6	7815.0	3688.6
80°	2366.1	2348.6	3284.2	4868.0	9214.9	10287.7	10687.7	10667.2	7607.8	4012.6	751.7
82.5°	1093.3	1096.2	1680.1	3107.6	6238.6	6946.5	7108.6	6187.5	2669.7	680.2	239.4
85°	544.5	550.3	808.7	1558.9	3522.2	4069.5	3868.1	2574.8	572.2	198.5	143.0
87.5°	216.0	207.3	319.7	640.8	1271.4	1347.3	1176.5	515.3	103.6	70.1	48.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4	3443.4
2.5°	3453.6	3456.5	3469.6	3443.4	3450.6	3444.8	3440.4	3463.8	3462.3	3466.7	3459.4
5°	3463.8	3471.1	3484.2	3472.5	3484.2	3478.4	3482.8	3514.9	3519.3	3517.8	3517.8
7.5°	3491.5	3498.8	3523.6	3509.0	3535.3	3528.0	3529.5	3560.1	3566.0	3557.2	3554.3
10°	3549.9	3555.7	3590.8	3587.9	3598.1	3592.2	3586.4	3599.5	3596.6	3583.5	3577.6
12.5°	3617.1	3633.1	3672.5	3674.0	3687.1	3657.9	3627.3	3622.9	3614.1	3593.7	3589.3
15°	3717.8	3736.7	3796.6	3782.0	3773.2	3710.5	3659.4	3618.5	3583.5	3566.0	3549.9
17.5°	3862.3	3894.4	3977.6	3932.3	3868.1	3776.2	3687.1	3598.1	3523.6	3460.9	3436.1
20°	4046.2	4082.7	4152.7	4092.9	3995.1	3857.9	3713.4	3552.8	3390.8	3252.1	3231.7
22.5°	4265.1	4323.5	4374.6	4237.4	4092.9	3919.2	3713.4	3482.8	3214.2	3006.9	2955.8
25°	4520.6	4565.8	4549.8	4357.1	4148.4	3929.4	3672.5	3358.7	2979.2	2738.3	2697.5
27.5°	4797.9	4818.4	4694.3	4414.0	4154.2	3869.6	3557.2	3138.3	2704.8	2515.0	2475.6
30°	5139.5	5078.2	4841.7	4449.1	4095.8	3736.7	3351.4	2815.7	2481.4	2315.0	2269.8
32.5°	5507.3	5394.9	4946.8	4424.2	3967.4	3514.9	3033.2	2588.0	2332.5	2129.7	2091.7
35°	6208.0	5888.3	5100.1	4349.8	3744.0	3218.6	2725.2	2412.8	2174.9	1957.4	1922.4
37.5°	7153.8	6597.7	5314.6	4246.2	3479.8	2931.0	2496.0	2226.0	2020.2	1795.4	1739.9
40°	7889.5	7314.4	5659.1	4135.2	3236.1	2658.1	2329.6	2128.2	1918.0	1678.6	1630.4
42.5°	8590.1	7969.8	6082.4	4011.2	2985.0	2468.3	2256.6	2106.3	1890.3	1646.5	1601.3
45°	9209.0	8499.6	6447.3	3887.1	2701.8	2293.1	2202.6	2064.0	1850.9	1605.6	1561.8
47.5°	9709.7	8955.0	6764.1	3752.8	2444.9	2160.3	2132.6	1986.6	1775.0	1522.4	1469.9
50°	10162.2	9340.4	6983.0	3609.8	2193.9	2052.3	2017.3	1845.0	1624.6	1401.3	1367.7
52.5°	10441.0	9601.7	7114.4	3633.1	1956.0	1931.1	1874.2	1697.6	1493.2	1302.0	1258.2
55°	10732.9	9848.4	7112.9	3501.7	1757.4	1748.7	1694.7	1558.9	1398.4	1237.8	1211.5
57.5°	10852.6	9870.3	6980.1	2884.3	1582.3	1526.8	1515.1	1443.6	1303.5	1151.7	1122.5
60°	10932.9	9773.9	6729.1	1969.1	1361.9	1322.5	1379.4	1331.2	1204.2	1045.1	1015.9
62.5°	10854.1	9668.8	6070.7	1421.7	1194.0	1215.9	1269.9	1217.4	1084.5	940.0	915.2
65°	10665.8	9267.4	4793.5	1107.9	1119.6	1167.7	1210.1	1122.5	878.7	735.7	721.1
67.5°	10152.0	8504.0	3084.3	1015.9	1077.2	1126.9	1141.5	950.2	795.5	658.3	642.3
70°	9070.4	6826.9	1188.2	957.5	1034.9	1056.8	997.0	871.4	731.3	613.1	598.5
72.5°	7095.4	4482.6	686.0	875.8	944.4	924.0	925.4	782.4	659.8	547.4	535.7
75°	4409.6	1623.1	610.1	779.5	799.9	837.8	789.7	678.7	567.8	500.7	486.1
77.5°	1458.2	461.3	564.9	671.4	716.7	689.0	661.2	579.5	486.1	433.5	426.2
80°	353.2	345.9	506.5	525.5	562.0	515.3	512.3	481.7	410.2	379.5	372.2
82.5°	217.5	248.1	402.9	327.0	375.1	379.5	432.1	397.0	299.2	310.9	300.7
85°	134.3	191.2	211.7	157.6	159.1	213.1	258.4	239.4	179.5	169.3	167.9
87.5°	45.2	39.4	45.2	33.6	45.2	77.4	116.8	110.9	74.4	51.1	48.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)